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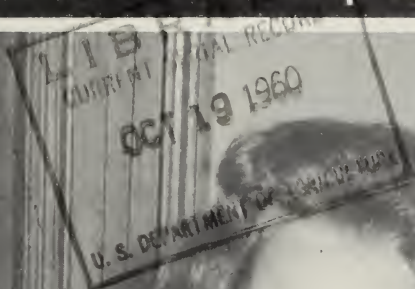
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Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

OCTOBER
1960

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TELEPHONE POTENTIAL

—Page 11



A Message from the

ADMINISTRATOR

The Virginia Association of Electric Cooperatives is doing something about raising the State's income level. The co-ops propose to furnish a major part of the leadership in a drive to bring industry to Virginia's rural areas.

More local payrolls, the co-ops realize, will bring about a better rural life. The State will benefit. So will communities. So, of course, will the co-ops themselves.

The Association is planning a program to attract industry to the service areas of member co-ops. It plans to coordinate this effort with the Rural Development Program.

Several things are essential for any new industry: industrial sites, good water, transportation outlets, a labor supply, dial telephone service, and a reliable power supply.

There are other things a new payroll prospect may demand: good schools, hospitals, and recreation areas. Here's where it pays to work with the Rural Development Program. It has at its call the specialized talents and functions of many agencies. Some are devoted to finding better ways of making more income. Some specialize in improving local services and institutions.

Virginia co-ops know that they will gain much from the efforts of all these groups. The Program will gain tremendously, too, from the co-ops' contribution.

Rural Lines

Administrator.

John H. Howard, Editor. Contributors to this issue: William M. Baker, Louisan Mamer, Charles Shay. Photo credits: Walter I. Ettleman and Louisiana Rural Electric News.

Cover Picture: Norma Green, Miss REA of 1960, chosen at the Annual REA Picnic in August. See story page 11.

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CYCLE BILLING SPREADS

the WORKLOAD

During its 47th year in 1953, Garden Valley Telephone Company of Erskine, Minn., took action on a problem that had been getting bigger every year. It grew, in fact, every time a new subscriber was connected. That problem is an inseparable part of growth. It is familiar to rural telephone systems across the country. It can be stated in one word—billing. For Garden Valley's billing clerks, the beginning of each month ushered in a period of frenzied toil in an effort to cope with a job that got bigger and tougher every passing year.

"There just didn't seem to be enough hours in the day to get our billing done in time," a Garden Valley billing clerk said. "It was a hard and hectic time for all of us. It was a real ordeal."

For Garden Valley billing clerks this monthly ordeal ended in 1953 when the company instituted Cycle Billing.

Cycle billing divides the job

of billing into manageable parts and spaces them out over the month.

Harold Peterson, who succeeded Carl M. Ostby as manager upon his retirement in June, is enthusiastic about the cycle billing instituted by Ostby. "We think that it is far superior to our old system of billing," he says. "We know from experiences that it is the best answer to a problem that keeps pyramiding every time we connect new subscribers."

The rate of Garden Valley's pyramiding growth since it began in 1906 with 18 telephones piles up cogent reasons why the company turned to cycle billing. By its first decade Garden Valley was serving 2,315 telephones; by 1926, 3,575; by 1946, 5,519; and on its 50th birthday in 1956, it was serving 6,410 'phones.

Garden Valley has 21 exchanges. It divides the billing for these exchanges into some 60 "controls." A "control" is a varying

Mary Jane Hamre, billing machine operator, finds cycle billing less hectic.





BOOM SPRAYER BEATS BRUSH

To cope with the problem of high-growing brush, a familiar cause of line noise on rural telephone circuits, Garden Valley Telephone Company of Erskine, Minn., has improvised a device that passing motorists gawk at in wonder.

It is a 20-foot boom, hydraulically operated, mounted on a 1½ company truck. The boom holds two line crewmen out over the roadside brush. The crewmen, gripping nozzles, spray the brush from above. One of the crewmen is equipped with a telephone attachment which enables him to communicate with the driver of the truck to warn him to stop the vehicle or swerve to avoid trees or other obstacles in the path of the moving boom.

The mobile sprayer boom was improvised from a length of cast-away pipe by Garden Valley's own men.

Once the brush has been cleared from the right-of-way, only one man is needed thereafter on the spraying end of the boom, Garden Valley Manager Harold Peterson says.

den Valley's averages about 100 bills a month. Control areas may vary slightly in size. When a "control" becomes too big, because of new connections in its area, part of its billing is allocated to "controls" for adjacent areas.

Garden Valley bills on the 5th, 10th, 15th, 20th, 25th, and 30th of each month. Approximately ten "controls," comprising some 1,000 subscribers, are billed on each of these dates.

"Controls" in billing were instituted by Garden Valley after it had experimented with cycle billing by exchanges. Billing by exchanges did not work out. Some exchanges were large; others small. The result was an uneven work load with sharp drops and rises. The goal of cycle billing is an even work load which, if charted on a graph would appear as a straight horizontal line.

When it tried cycle billing by exchanges, Office Manager Irvin Dille says, "We sometimes got a billing tape 60 feet long. This presented a serious problem. A tape that long is simply too unwieldy when corrections have to be made."

That's why Garden Valley switched its cycle billing from exchanges to "controls." "Control" billing tapes, under the cooperative's present system of cycle billing, do not exceed 12 feet in

number of telephones in a specific area. Each "control" of Gar-

Two men can cover a lot of ground with the sprayer boom.

Harold Peterson thinks Carl Ostby's cycle billing a superb method.

length. The company's largest exchange, now broken down into "controls," accounts for five 12-foot billing tapes.

Office Manager Dille says that "controls" or something similar are essential in cycle billing. "We found that 'controls' add a new dimension of flexibility to cycle billing," he says. "They have another thing in their favor—you can add as many additional 'controls' as you need to cope with a growing billing job."

Dille sums up the advantages of cycle billing as follows:

1) It spaces out the job of billing evenly over the month.

2) In so doing, it prevents bottlenecks in other phases of office routine by freeing billing clerks for other office tasks after the day's billing schedule has been completed. Under the old method of billing clerks were tied up full-time for a number of days each month.

3) By eliminating the necessity for haste, cycle billing acts to reduce billing errors.

4) By spreading billing out over the month, it makes for more efficient use of the clerical staff and, in the face of system growth, defers the time when new workers must be added to the office



staff. A uniform workload, with few peaks or valleys can be handled by fewer workers than an uneven workload.

Manager Peterson recalls that the Garden Valley Telephone Company, like many other rural systems, used to bill rural subscribers once a year. They were many variants, however. Some farmers preferred to be billed quarterly or semi-annually; or "some other time, please." Town subscribers were billed monthly as a rule, but in this case, too, it was pretty much a matter of customer's choice.

This was an essential stage in the growth of the rural telephone business, he says. It served the needs of the times. Now as rural telephony prepares for the bustling years ahead, he believes that cycle billing has a big role to play.

For the cycle of growth that economists predict is ahead, Garden Valley's management believes that cycle billing will do the job.

PATIENCE AND PERSISTENCE

—if you want to MERGE

Headquarters of the Minerva Valley Telephone Company is at Zearing, on Highway 65 in central Iowa. The spick-and-span headquarters building is a credit to Zearing, a thriving town of 1,000. The 175-mile line serves 722 subscribers from its two exchanges—one at Zearing, the other at Clemons—mostly farms, but including besides Zearing the two hamlets of Clemons and St. Anthony.

The farms in the Minerva Valley area look very much like the farms any place within 100 miles of Zearing. The rich black soil lies 18 inches deep on the gently rolling terrain; there is practically no waste land. The farms along the straight, section-line

roads are strictly modern. Their operators use up-to-date farm equipment and business methods. They are experienced in organizing farm marketing groups. The telephone is an instrument that has been in almost universal use in this area for a couple of generations. Almost every farmer cranked up his old magneto telephone frequently to order repairs and to call live-stock markets.

Therefore, one might assume that it would be a cinch to merge three small mutual magneto telephone companies to get an efficient-sized organization for conversion to dial telephony. It wasn't, however, and the experience of the Minerva Valley area is quite similar to that of many others.



Minerva Valley area farmers save labor through electric auger feeding.



Roy Falk believes good public relations is a must for rural telephony.

The problem, not apparent on the surface, was a lingering pride in neighborhood institutions, accentuated by a faster-paced mobile age that seems to make old neighborhoods obsolete. The solution was patient, persistent work on the part of leaders in each of the three communities, leaders who believed that modern telephony could be a mighty force in shaping strong rural neighborhoods of the future.

They used not only patience, but tact, and their own intimate

knowledge of the region's history, in which neighborhood loyalty is rooted.

In the days before highway travel, Clemons, St. Anthony and Zeiring were adjacent stations on a branch line of the Minneapolis and St. Louis Railroad, the only transportation route to markets and the big world outside. They were thriving little towns full of civic pride and very much centers for the farming areas surrounding them. Rivalry was keen among them, and each developed a particular character in which they took pride, something akin to what is called an "image" in modern advertising jargon.

Clemons, named for a rugged pioneer named William Clemons, used to be called "Billytown" and its image of itself derived from the town's founder. Irish settlers were attracted to St. Anthony because of its name. Interestingly enough, the town was named for its first two settlers, both non-Irish: Anthony Pierce and John Q. Saint. Zeiring, named for a railroad builder, built an early image of itself that was somewhat more cosmopolitan.

Symptom of changing times is this former schoolhouse, now used for grain storage.





Farmer Dale Cook believes area people will have wider neighborhood relations now.



Lucille Reed is one of the company's best assets for public relations.

Lyle Powell, outside plant man, sells telephony all day long.



As time went on, the populations of these three neighborhoods mixed. The images remained. Then came the automobile. Clemons and St. Anthony declined in population; Zearing just held its own. Business slumped as people began to drive to adjacent county seats to shop. Livestock trucks took away the railroad's main revenue; regular train service was discontinued and stations were closed.

This was the scene a few years ago when local people began to demand better telephone service. Zearing's system then had 385 subscribers; Clemons had 200 and St. Anthony 126. The outside plants of all three were in bad shape. It was apparent that the only economical solution was for each company to merge.

Organizers from each locality found that an extra obstacle had been added to the frustration each community felt because of the general decline. School district reorganization was causing bitterness between neighborhoods. It did little to make the way smoother for the proponents of merging.

The patient work eventually paid off, however. Subscribers from the Clemons and St. Anthony areas began to get back of the new company as they began to see that with equal representation on the board they were really gaining a wider identity.

As for Zearing, the town compromised on the new company's name. The original name was the Tri-County Telephone Company, indicating that the company served subscribers in Story, Marshall, and Hardin Counties. It was a name associated with Zearing through its weekly news-

paper, the Tri-County News. Zearing didn't care for the name "Minerva Valley." Minerva Creek runs through Clemons and St. Anthony, but not Zearing. The Minerva Valley name had long been associated with the former towns: there had been a Minerva Valley Cooperative Creamery, a Minerva Valley Elevator, a Minerva Valley baseball league and other institutions. Concession on the name was a major clincher in making the new company a success.

And a real success it has been in its first years. Manager Roy M. Falk studied engineering at the University of Nebraska and had been in the construction business in western Iowa. He understands local problems and believes in service. Lyle Powell, the outside plant man, sells service while working at maintenance. The company has sold 82 extensions, and so far hasn't even been concerned with a real extension telephone campaign. Before cutover a year ago, the Minerva Valley company sold between 30 and 40 percent colored telephones.

"The telephone man did it so easily," said a farm wife with three colored instruments. "I told him when I saw him coming up the walk, 'I'll bet you are going to try to sell me that telephone for the hired man's house, and you know I don't need it.' I knew he was a good salesman and wanted to beat him to the punch. He said, 'You certainly don't need this old black telephone. Nowadays you have to keep good hired men happy. I'm going to sell you this nice yellow telephone.'"

"Service is what is giving the company success," says Board Member Leo Dunn. "With good



Banker Dale Tisdale (left) and Dr. Charles Hall say the change in name helped cement relations on the system.

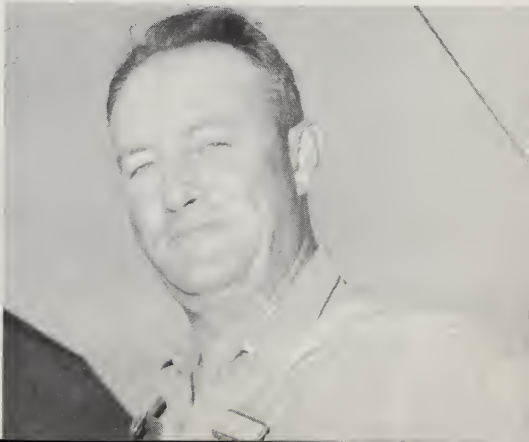
service people will forget their objections."

Board member Dr. Charles Hall believes that Falk's success in sales and service is due largely to picking top-notch employees such as Powell and Lucille Reed, who takes care of billing and office contacts.

Banker Dale Tisdale is president of the board. He takes a far-sighted view.

"We could have built an even better company if we had been able to merge even more local exchanges. We would have been able to put out good service at even cheaper rates. A good telephone company can build rural communities stronger than they used to be. Those highways run both ways. They can bring us industry and business as well as take it away. Telephony can help do it."

Farmer Leo Dunn uses dial telephony daily in his widespread livestock operations.





Left to right: Lou Bakos, Rachel Stevens, Earl Conrad and Kenneth Conrad.

NICKNAMES IN THE BOOK

If you were passing through Breaux Bridge, La., and wanted to look up an old Army buddy whom you remembered only by nickname, there would be a fair chance of finding him in the telephone book.

Earl J. Conrad, president and manager of the Breaux Bridge Telephone Company, has nicknames listed along with names, if subscribers so request.

Breaux Bridge is in a long-settled area, and many of its 2,364 subscribers have the same names.

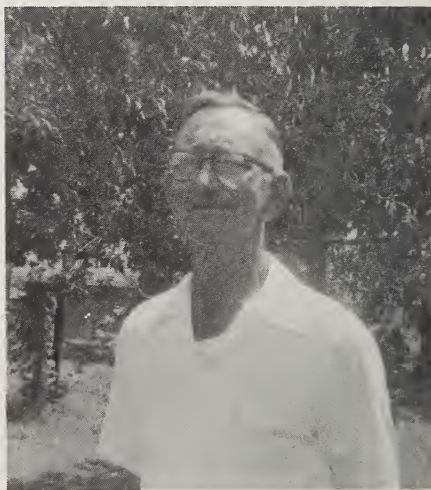
If one were calling Albert Broussard, for instance, he'd find two such, but one listed Broussard Albert (Tite). Or he'd be able to distinguish between the two Paul Guidrys; one is listed Guidry Paul (Blanc).

Among the many Thibodeaux's U J (June). It is easy to see that anyone calling June Thibodeaux might be baffled by the initials: U J.

While big city newspaper columnists in Louisiana and California have given space to Breaux Bridge's telephone book nick-

names, Conrad insists that it isn't a new-fangled idea thought up by promotion men.

"Before the days of unattended dial service," says Conrad, "the telephone operator gave personal service. One had merely to mention a subscriber's nickname and the operator would ring it. When Breaux Bridge was converted to dial in 1949 the subscribers were compelled to use the directory, which did not list nicknames.



Amilcar (Goon) LeBlanc is no longer confused with all the other LeBlancs.

R. D. Domingues is (Papoot) in the regular listing; (Papoute) in his yellow page ad.

"This brought about complaints by those who were known only by their nicknames and by those whose names were similar to others."

The imagination of some of Earl Conrad's grateful subscribers is attested to by their colorful nicknames, such as: Portage, Pou Pou, Goon, Papoot, Te Shoon, Pa Pa Cairo, Boo Boo, and Peco.



IT'S A GREAT POTENTIAL

Pretty 20-year-old Norma Green says she set a new record for telephony recently. It was the day after she was elected Miss REA at the Annual Picnic sponsored by REA employees. She talked to her boy friend for 3 hours. She doesn't say what they talked about or who paid the toll bill.

It was exactly 3 hours longer

Norma Green, Miss REA.



than she had ever talked to any one over the telephone 2 years ago when she first joined the REA staff. The word went around then that there was a new secretary in Assistant Administrator Beall's office who had never used a telephone, had to be shown how to dial. However, this was just slightly exaggerated. She had talked on the telephone once, had taken a receiver from someone else and said hello to a friend.

Otherwise, there just never had been any occasion for her to use a telephone back in Lonaconing, Maryland. There wasn't a telephone in the parental Jesse Green farm, and none of her neighbors or relatives thereabouts had one.

There are whole areas in rural America still without telephones. It's a great potential. If you could reach them by telephone you could talk to all the Norma Greens, who inspire young men to run up lucrative 3-hour toll bills.



Line superintendent Daniel Theriot stops to chat with a cane-cutting crew.



Fishing, shrimp, crawfish—all use electric power from Teche.

Sugar mill at historic Lawn plantation, one of several on Teche lines.



PLOW IT BACK INTO PLANT

Edgar Chaney, manager of the Teche Electric Cooperative, Jeanerette, La., isn't an easy man to interview. A reporter is apt to have many interruptions, for people bring their problems to Chaney. He speaks their language—English or French—with Louisiana charm. Also, Chaney personally built much of the 450-mile system, and remembers practically every pole. This is one of the keys to the co-op's excellent member relations.

For instance, there was the sugar planter who interrupted with an urgent problem. He wanted a pole moved. This pole had been placed to avoid a swampy place on the bayou road. Lately, the planter had cleared that land for sugar cane. Knowing his field hands' carelessness, he feared that one of them might hit the pole—now right in the headland—with his tractor, get electrocuted.

Chaney replied that moving it might not be easy. "And we have a flat \$25 charge for moving poles. No exceptions to the rule. Of course, it could be a little cheaper if our linemen just happen to be going that way anyway."

After the planter had gone, satisfied, Chaney said, "Don't think this pole will be any trouble at all. I remember the pole. Set it myself in 1948. A crew is going that way tomorrow, so it probably won't cost the man much at all. But if he expects to pay \$25, then finds he doesn't have to, the co-op has one more friend."

The Teche Electric crews go down the bayou roads every day. One crew goes south, the other north, so that a quick trouble call will find one of them near the trouble source. The crews read meters, and Chaney feels that this unorthodox use of linemen is a big





Refund checks are a cause for jubilation at annual meeting.

asset in member relations.

"They take care of preventive maintenance as they go. They listen to complaints. People get to know them, regard them as friends. Then, when the crew has to go cut down trees on somebody's land, instead of these people giving them a hard time, they bring the crew coffee. A member who is a friend of the linemen is a friend of the co-op."

The Teche co-op is located in St. Mary's Parish, a region of bayous, swamps, canals, oil fields, levees, fishing fleets and sugar cane plantations. It also has concentrated residential sections, and the movement from town to country is marked.

The Teche co-op started in 1937. By the next year they were ready to energize 122 miles of single-phase line which cost an average \$650 per mile to build. They had 354 members who paid, on the average, an electric bill of \$3.63 per month for an average 54.7 kwh. The total sale of kwh

that year was 133,507, against 186,908 kwh the co-op bought at 1.1¢ per kwh. The co-op then had three employees and one truck. The truck cost \$900 and the annual payroll was \$2,800. Right from the start, the Teche Electric Cooperative was a solid rural utility enterprise.

When the co-op achieved its present 450 miles of line which serve 3,500 members along the bayou roads, it was still a solid enterprise. That was the limit of its probably geographic expansion, however. The system was surrounded on all sides by the lines of other utilities. Manager Chaney and his board of directors made a decision. They decided to plow earnings back into the plant and to build a co-op with solid member loyalty through good, reliable service.

To date, the Teche co-op has borrowed \$660,000 from REA for distribution plant, most of which has been advanced. The co-op has also invested about \$400,000 of general funds in plant. The co-op

has paid back \$237,000 on principal, paid \$78,700 in interest, as well as a cushion of credit of \$22,850.

In 1959, the average Teche member used 242.9 kwh each month, and paid a bill of \$7.20 per month. Power cost to the co-op is now 6.7 mills per kwh and their power bill last year was \$71,608. The payroll has grown to 19 employees, who earn a total of \$85,000 per year. It is plain to see that the Teche system remains a solid enterprise. Revenues last year were \$297,278, more than 200 percent above those of 10 years before. Margins were just short of 200 percent higher — more than \$100,000. What does a solid enterprise do in a situation like this?

"For one thing," says Manager Chaney, "we keep right on building up our plant with our general funds. It's worth more there than anywhere.

"For another thing, we can pay in advance more on our loan. We keep a good cushion of credit now. We don't worry as much as some co-op's do about such things as hurricanes or other disasters. If you have a disaster, you can always borrow the money to take care of it. That's what the loan program is for, and your credit is good you can get a loan. Especially with a good system like ours.

"But one thing is all-important to a rural electric co-op. That is good member relations. You haven't really got a co-op at all if you don't have good member relations. You'll have trouble selling electric service, and you won't have an organization that will stick it out through any kind of disaster.

"We made the first patronage capital refunds in Louisiana, and among the first in the country. People were skeptical of us then, but we felt that the members owned the co-op, and the money was theirs. So far, we've made three refunds, totaling almost \$83,500. It has helped boost member relations more than anything we've done."

Chaney, of course, regards employee relations much as he does member relations. The employees are his chief tools in building member relations, so he takes a great personal interest in their

Engineer Ken Raspberry (right) reads Sidney Freyou's meter.





Edgar Chaney is carrying on a successful yard light campaign.

finds that capital refunds make a good sales argument for electric power use.

"Can they refund you 3 months service every year?" he asks members as a clincher.

The co-op is also promoting house heating. The area will probably add 2,000 new homes during the next 10 years, on Bayou Jack, Cypremont Point and the Atchafalaya River levee. The same areas are likely spots for weekend fishing and hunting camps. An electrical house heating load could step up power usage and improve the co-op's load factor. Along with the homes will come schools, churches, and small commercials, all a market for air-conditioning and electric heating.

The Teche system has more than 220 commercials, and adds a new large commercial load about once a year. Commercials account for about a fifth of the co-op's revenues. However, Chaney does not take a very competitive attitude about large commercials, even though it is a highly competitive area with a mushrooming industry.

"This is a co-op," explains Chaney. "A co-op must concentrate on giving service to its members first. Everything else is secondary."

problems. The co-op is unorthodox in that it has no female employees.

"This staff has been with me a long time. All of them are good. Ken Raspberry, our engineer, knows the system about as well as I do. Clinton Reagan and his boys are whizzes at any kind of paperwork. Besides, could a girl shoot trouble during a storm? All my crew can, in a pinch."

Chaney is pushing electric water heating and ranges at present. He offers a special water heating rate of 300 kwh at 1.2¢ and the co-op allows \$15 toward electric ranges. Other fuels are cheap on the Gulf Coast; Chaney

POWER

use exchange



\$15 FOR VENTILATOR — “Any member installing a new automatic dairy, stable, or poultry house ventilating system on or after March 15, 1960, will be paid \$15 by Claverack Electric Cooperative, Inc. (Towanda, Pa.) . . .” Thus the co-op’s newsletter announced a promotion adopted at its Board of Directors’ March meeting.

The Board of Directors set up these qualifying conditions: (1) System shall contain motor, fan, thermostat, shutters, and guard(s) where required for safety; (2) motor shall be $\frac{1}{4}$ hp or larger; (3) fan shall be at least 24 inches or equivalent in capacity; (4) unit shall be connected to

individual circuit, switch, or pull-out controlled with proper protective device; (5) installation shall be subject to inspection.

AUTOMATION BOOTH — Three South Dakota co-ops built and manned a booth at the Watertown Agriculture Show last spring. Theme: “Automation of Your Farm.” Co-ops displayed a mix mill, tube feeder, and other equipment; and they showed slides on various feed-handling installations. Sponsors of the automation booth were H-D Electric Cooperative at Clear Lake; Lake Region Electric Association of Webster, and Codington-Clark Electric Cooperative, Watertown.

YOU CAN PREVENT FIRE

President Eisenhower has proclaimed National Fire Prevention Week for October 9-15, 1960. He urges all organizations and Government groups to devote this week to seeking means of preventing the scourge of fire.

Fire is one of the major causes of economic waste and human misery. It is needless waste that can be prevented. Electricity is a prime cause of fires in rural regions. Rural utility systems are urged by Administrator David A. Hamil to devote National Fire Prevention Week to inspection of fire hazards and to education of employees, consumers and sub-

scribers about the danger and possible prevention of fire.



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RECENT PUBLICATIONS

Electric Bulletins

New

- 2-2 Communications With Borrowers and Their Representatives
- 60-7 Service Reliability
- 103-9 2 Percent Treasury Bonds—R.E.A. Series
- 161-21 Uprating of Low Capacity Yard Pole Meter Loops

Revised

- 111-2 Electric Retail Rates

Partial Revisions

- 109-3 Supplement issued July 13, 1960

Deletions

- 45-4 Obsolete

Telephone Bulletins

New

- 301-2 Communications with Borrowers and Their Representatives
- 340-7 Effective Planning of Telephone System Construction
- 345-10 REA Specification for One Pair Aerial Distribution Wire
- 345-11 REA Specifications for Multipair Distribution Wire
- 403-4 2 Percent Treasury Bonds—R.E.A. Series
- 405-1 Financial Planning by Rural Telephone Systems

Revised

- 465-1 Audits of Telephone Borrowers' Accounting Records by Certified Public Accountants

Partial Revisions

- 322-1 Supplement 2 to Appendix A issued July 1, 1960.
- 340-3 Revised REA Form 809 announced May 16, 1960
- 340-4R1 Supplement issued July 1, 1960.
- 381-1 Supplement issued July 1, 1960.
- 381-4 Supplement issued July 1, 1960.
- 382-3 Supplement issued July 1, 1960.
- 404-1 Supplement issued July 1, 1960.
- 409-2 Supplement issued July 13, 1960.
- 465-2 Revised attachment issued July 5, 1960.

Deletions.

- 465-3 Superseded by Bulletin 465-1.

THE LAMPREYS DIDN'T LICK 'EM

Gill's Rock, on the Wisconsin mainland, is the jumping off place for Washington Island, 6 miles away across Portes des Mort channel. They used to reach the island in winter by bobsledding across the ice (and not all the bobsleds got there). Nowadays an ice-breaking ferry boat makes the trip daily. In summer, three ferry boats make several daily trips to handle the island's increasing tourist business.

Electricity from the Washington Island Electric Cooperative makes this tourist business possible.

Manager Ray Krause (left) and Leonard Jorgenson are the total payroll.



The cooperative has 410 service entrances on its 56 miles of line, which is pretty good, considering that the heavily wooded island has only 26 square miles and less than 800 permanent inhabitants. The co-op is small, but it is solvent. Its solvency is a tribute to the good judgment of an REA field man back in 1940, whose report gave the green light for an electrical loan to the island's people.

The field man said in effect, "The island's population, mostly Scandinavian, is the stable type which will make a cooperative work." The field man perhaps could not foresee a scourge to the small island's economy in the form of the lamprey, a salt water eel which was even then swimming up the Great Lakes from the Atlantic Ocean. His faith in the islanders, however, enabled them to put up a Diesel power plant, which makes possible the island's new economic mainstay, a growing resort business.

Back in 1940 the Washington Islanders still made a good living fishing for lake trout, sturgeon and whitefish, mostly for the Chicago market. The island was settled in the 1880's by Icelanders, still the largest ethnic group in the predominantly Scandinavian population. They take pride in the reputation they have of being the largest Icelandic settlement in the United States.

Fishing was then a more profitable way of making a living than farming. Washington Island farmers were planting fewer potatoes, although the sandy soil was ideal for that crop. Mainland Door County is famous for its



Lampreys:
scourge of all
good fish in
Lake Michigan.

cherries, but there were only a few orchards on the island. There were marketing problems in dairy farming. Whole milk had to be ferried to the mainland, and except for summer seasonal business (resort and fruit pickers) on the tip of the peninsula, there wasn't much of a market short of Sturgeon Bay, 40 miles down the peninsula with no rail transportation between. The island had a saw-mill, and about 40 seasonal cottages. The resort business was just beginning to build up.

Washington Island's need for an electrical co-op derived from topography. No power source would risk a submarine cable across Portes des Mort passage to the mainland. The telephone company had one, and it was frequently broken by the rock in the bottom of the channel when the current was strong.

The co-op started with a \$40,000 loan to build 26 miles of line

and to buy a 100 kw diesel generating plant. And then came the lampreys.

The eel-like lamprey preys on fish, and it picks out large fish of the good commercial species. The lamprey has knife-like teeth in a round suction-cup mouth by which it can attach itself to a fish and quickly destroy it. Lake Michigan was paradise from a lamprey's point of view. The lampreys thrived, and in a few short years virtually ruined the big lake's fishing industry. Experts found ways to poison their spawning streams, but it took time to find poisons that would kill lampreys but not other species. Meanwhile, there were fewer good fish in the lake, and a fisherman has to catch fish if he is going to make a living and have enough left over to afford a sizable enough amount of kwh to put a co-op in the black.

Two years after the co-op's first



Ray Krause receipts monthly bill for Board Member **Arni Richter**.

She used to be a Mackinac ferry; now she's a potato warehouse.



lines were energized in 1945 the average use of power per member per month was only 131 kwh. Income that year for the system was \$21,078. It was a tough time for Manager Raymond Krause, who had been a school teacher on the island, and for the coop's board.

Several things helped the islanders' purchasing power. They turned more to farming. A cooperative was formed, the Island Dairy, to buy an old cheese factory and modernize it. The cheese factory turns the farmers' milk into longhorn, which sells well everywhere and won't spoil if it doesn't have rapid transportation to market. The potato business revived. Wharfage and warehouse space had previously been a problem in potato growing and shipping. The island's largest potato grower, Edward H. Anderson, solved the problem by buying a car ferry which had been declared surplus when the new bridge was built across the Straits of Mackinac. The old ferry, renamed for Anderson, lies alongside a dike. Potato trucks drive aboard to unload their cargoes for storage. Twice a year the floating warehouse is towed to market in Chicago.

Also, the end of World War II

brought a great demand for recreation areas. Washington Island people reasoned that a pleasant spot like theirs, surrounded by the waters of upper Lake Michigan, might be very appealing to people in Chicago during summer heat waves. With electric current, they could handle more tourist business. With modest pamphlets, they began to advertise.

The summer business began to grow. Existing accommodations were filled to capacity; new ones were built. The island now has five hotels, with a total of 75 rooms. They are mostly inns which were once rambling big old farmhouses. Proprietors cannily realize that the quiet island, with no splashy resort attractions that a bigger place might afford, will appeal to people who come back year after year. They emphasize Scandinavian cuisine in their country-style dining rooms; take pains to achieve approval from gourmet authorities. Two of them have managed to get full-color notice in National Geographic and other magazines. Feature articles have appeared in Chicago and Milwaukee newspapers, the result of their effective amateur press-agentry.

Two new motels have been



Fisherman Everett Ellefson says that new methods of killing lam-preys are bringing the fish back.

Oliver Bjarnason says that islanders have succeeded mostly through thrift and hard work.



built, tourist rooms are for rent by some islanders, and 50-odd cottages are for rent. A greater number of cottages have been built by city people for their 2-week vacations or for family summer living.

The islanders have used what resources they had available to develop attractions for visitors. An annual Scandinavian Festival and Smorgasbord is held in mid-July. In August they hold the Washington Island Fair. An outdoor theatre group plays in July and August. An art colony is growing. In August the community sponsors a ferry boat moonlight cruise. A gift shop is specializing in Icelandic handicrafts.

Several commercial fishermen have become sport fishing guides, and island literature stresses the good bass, pike and perch fishing in its reefs and little interior lake. An Indian Museum at the latter houses memorabilia and artifacts, collected by the late Jens Jacobsen, of the several tribes which have inhabited the island.

Islanders have built a park on Schoolhouse Beach, a good swimming spot. Two other parks have been built. Islanders are quick to mention the scenic spots to camera fans, and to help skin divers from the city cruising offshore find the several old wrecks buried under the channel by bygone storms. The island sports an airport for small planes; one hotel's literature says: "Buzz hotel located on Detroit Harbor (one circle, one dip) and we will meet you at the Airport." One of the three taverns shows movies two nights a week for cinema lovers. With only two churches on the island, community people bring a priest from the mainland during the summer months to hold services in the Legion Hall. Dr. J. C. Pinney is equipped to take care of medical needs of visitors. Two garages, four groceries, and three taverns scattered about the island handle the other demands of summer people.

"We used to run one ferry boat," says Arni Richter, board

Nathan Gunn-
laugsson pilots
the *Voyageur* to
the mainland sev-
eral times each
day.



member and ferry operator. "Now we run three in summer."

Income of the co-op in 1959 was up to \$52,197, reflecting the 378 kwh the average member now uses per month. The seasonal residents are the heaviest users. They average 875 kwh, compared to 618 for small commercials, 333 for farms, and 266 for non-farm residences. Public buildings use 182 kwh per month on the average.

Manager Krause says his annual sales will reach 16,200 by 1970.

"Farms should be using 660 kwh per month by then," says Krause. "Other residences will use 450. The seasonal will still be the big user, with 960 kwh per month, and small commercials will need 940 kwh."

Krause operates the system with the help of Leonard Jorgenson, who is plant engineer, lineman, and general assistant. The co-op uses self billing, which cuts Krause's paperwork down to a minimum.

Jorgenson now has four diesel units to take care of; they have a total capacity of 570 kw. The

system has 56 miles of line, one substation. The co-op hopes to increase generating capacity, heavy up the system, and put in a larger substation to take care of future needs. So far, they have invested \$323,000 in the system, and the days of worrying about meeting their debt service seems far in the background.

"Besides a growing resort business, we are looking for a small industry to take up the slack in winter employment," says board member Percy Johnson. "Something employing about 50 people."

"A small industry coming to Washington Island would have to make something easy to transport," says board member Everett Ellefson.

"Something like plastics. Be a good load for the co-op and a good thing for the island."

"Best of all," says board member Oliver Bjarnarson, "The fishing will come back soon. They have the lampreys on the run and are restocking the lake. Then we can boost the co-op's load with icemaking machines. The catch is too small now to make them pay out."



This rural electric system's pole, as you can see, was badly decayed. It fell across the road, and the phase wire remained energized, since the insulator prevented it from grounding out.

It aroused the curiosity of an 8-year old boy. He poked at the phase wire with his foot.

The boy lived for 6 weeks more, but passed away following amputation of his leg.

The cost of this accident would have paid for the inspection and replacement of defective poles in several hundred miles of primary line.

